

WHAT IS CLAIMED IS:

1. A method comprising:

allocating space in a host memory for use as a buffer; copying contents of a memory of a network interface controller into the buffer; and

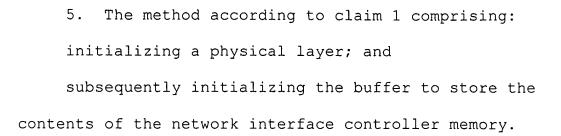
accessing the buffer in response to a request for information in the network interface controller memory.

2. The method according to claim 1 further comprising: modifying the contents of the network interface controller memory; and

correspondingly modifying the contents of the buffer.

- 3. The method according to claim 1 further comprising: initializing a device driver in a Network Driver Interface Specification environment to allocate the space in the host memory in less than a second.
 - 4. The method according to claim 3 comprising:

initializing the buffer to store the contents of the network interface controller memory wherein initializing the buffer occurs at a different time from the driver initialization.



- 6. The method according to claim 1 wherein the network interface controller memory comprises an EEPROM.
 - 7. A method comprising:

copying contents of a network interface controller memory into a buffer in host memory;

recopying the contents of the network interface controller memory into the buffer if the contents of the network interface controller memory are modified; and accessing the buffer in response to a request for

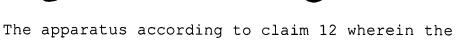
information in the network interface controller memory.

- 8. The method according to claim 7 further comprising: initializing a driver to allocate memory space to the buffer.
- 9. The method according to claim 8 further comprising: initializing the driver in a Network Driver Interface Specification environment in less than a second.

- 10. The method according to claim 8 further comprising: initializing the buffer at a time different from the driver initialization.
- 11. The method according to claim 7 further comprising:
 initializing the buffer to store the contents of the
 network interface controller memory in response to a first
 request to read the contents of the network interface
 controller memory.
 - 12. An apparatus comprising:
 - a network interface controller containing a memory;
 - a bus coupled to the controller;
- a host memory coupled to the bus and having space allocated for use as a buffer; and
 - a processor coupled to the host memory and configured to:

copy contents of the network interface controller memory into the buffer; and

access the buffer in response to a request for information in the network interface controller memory.



modify the contents of the network interface controller memory; and

processor is further configured to:

correspondingly modify the contents of the buffer.

14. The apparatus according to claim 12 wherein the processor is further configured to:

initialize a device driver in a Network Driver Interface Specification environment to allocate the space in the host memory in less than a second.

15. The apparatus according to claim 14 wherein the processor is further configured to:

initialize the buffer to store the contents of the network interface controller memory, wherein the buffer initialization occurs at a different time from the driver initialization.

16. The apparatus according to claim 12 wherein the processor is further configured to:

initialize a physical layer; and

subsequently initialize the buffer to store the contents of the network interface controller memory.

- 17. The apparatus according to claim 12 wherein the network interface controller memory comprises an EEPROM.
 - 18. An apparatus comprising:
 - a network interface controller containing a memory;
 - a bus coupled to the controller;
 - a host memory coupled to the bus; and
- a processor coupled to the host memory; wherein the processor is configured to:

copy contents of the network interface controller memory into a buffer in the host memory;

access the buffer in response to a request for information in the network interface controller memory; and

recopy the contents of the network interface controller memory into the buffer if the contents of the network interface controller memory are modified.

19. The apparatus according to claim 18 wherein the processor is further configured to:

initialize a driver in a network driver interface specification environment to allocate memory space to the buffer in less than a second.

- 20. The apparatus according to claim 19 wherein the buffer is initialized at a time different from the driver initialization.
- 21. The apparatus according to claim 18 wherein the processor is further configured to:

initialize the buffer to store the contents of the network interface controller memory in response to a first request to read the contents of the network interface controller memory.

22. An article comprising a computer-readable medium that stores computer-executable instructions for causing a computer system to:

allocate space in a host memory for use as a buffer; copy contents of a memory of a network interface controller into the buffer; and

access the buffer in response to a request for information in the network interface controller memory.

23. The article according to claim 22 further including instructions for causing the computer system to:

memory; and

modify the contents of the network interface controller

correspondingly modify the contents of the buffer.

24. The article according to claim 22 further including instruction for causing the computer system to:

initialize a device driver in a network driver interface specification environment to allocate the space in the host memory in less than a second.

25. The article according to claim 24 further including instruction for causing the computer system to:

initialize the buffer to store the contents of the network interface controller memory wherein initializing the buffer occurs at a different time from the driver initialization.

26. The article according to claim 22 further including instructions for causing the computer system to:

initialize a physical layer; and

subsequently initialize the buffer to store the contents of the network interface controller memory.

27. An article comprising a computer-readable medium that stores computer-executable instructions for causing a computer system to:

copy contents of a network interface controller memory into a buffer in host memory;

recopy the contents of the network interface controller memory into the buffer if the contents of the network interface controller memory are modified; and

access the buffer in response to a request for information in the network interface controller memory.

28. The article according to claim 27 further including instructions for causing the computer system to:

initialize a driver in a Network Driver Interface

Specification environment to allocate memory space to the buffer in less than a second.

29. The article according to claim 27 further including instructions for the computer system to:

initialize the buffer to store the contents of the network interface controller memory in response to a first request to read the contents of the network interface controller memory.